

REMARKS

The Applicant has filed the present Amendment pursuant to 37 C.F.R. § 1.111 and in reply to the outstanding Official Action of March 25, 2003. The Applicant submits that the Amendment is fully responsive to the Official Action for reasons set forth below.

In the present Official Action, the Examiner first rejected Claim 2 pursuant to 35 U.S.C. § 112, second paragraph, as allegedly indefinite for failing to point out and distinctly claim the subject matter that the Applicant regards as the invention, for the reasons set forth in the present Official Action. The Examiner further rejected Claim 2 pursuant to 35 U.S.C. § 102(a), as allegedly anticipated by Jensen, et al. (Bioinformatics Apr. 2000, Vol. 16, No. 4, pages 326-333) (hereinafter "Jensen"). More specifically, the Examiner alleged that Jensen's method for finding patterns in an array discloses the claimed method for analyzing the structure of a target array.

At the outset and before addressing the particular rejections raised in the present Official Action, the Applicant taken care to amend the independent Claim 2 to recite the present invention more explicitly. More specifically, the Applicant has amended Claim 2 to more clearly recite that the method for analyzing the structure of a target array comprises the steps of converting the target array into a first array (Claim 2) and into a second array (formerly Claim 1). The first array is generated by (i) replacing a variable that is included in the target array into information that represents a location of the same variable if it is present upstream with respect to the variable when the target array is viewed along a path extending in a predetermined direction; (ii) replacing the

variable into information that indicates if the same variable is not present upstream with respect to the variable; and (iii) repeating steps (i)-(ii) for all the other variables included in the target array. Support for generating the first array is found in the specification on page 20, line 1 to page 22, line 6 in view of Fig. 3 (See specifically the example on page 22, line 6). The second array is generated by (i) replacing a variable that is included in the target array to information that represents a location of said variable with respect to a different complementary variable present upstream with respect to said variable when the target array is viewed along a path extending in a predetermined direction from the variable present upstream to said variable; (ii) replacing said variable to information that indicates if no other different complementary variable is present upstream with respect to said variable; and (iii) repeating steps (i)-(ii) for all the other variables included in the target array. Support for generating the second array is found in the specification on page 22, line 8 to page 24, line 17 in view of Fig. 4 (See specifically the example page 24, line 17). The first array and the second array are then used to analyze the structure of the target array, as particularly recited in the independent Claim 2.

In addition, the Applicant has added a new Claim 12 that recites the invention more succinctly and from a different perspective. Support for this claim is likewise found in the specification on pages 20-24 in view of Figs. 3 and 4. More specifically, the present specification provides excellent examples of the two arrays that are generated from the target array on page 22, line 6 (first array) and page 24, line 17 (second array).

Regarding the rejection of Claim 2 pursuant to 35 U.S.C. § 112, second

paragraph, the Applicant respectfully submits that Claim 2, as amended (and particularly described in the specification with reference to Figs. 3 and 4), is definite and particularly points out and distinctly claims the subject matters that the Applicant regards as the invention. More specifically to the Examiner's request for clarification of lines 11-12 in Claim 2, the Applicant has amended Claim 2 with the steps of Claim 1 directed to generating the second array. As to the Examiner's request for clarification of the preamble, the Applicant has amended the preamble to recite that the method is for analyzing the structure of a target array that consists of a plurality of different kinds of elements and the method comprises the steps recited in Claim 2, as amended (i.e., analyzing the structure of the target array using the first array and the second array). It is clear that the target array consists of a plurality of different kinds of elements. As mentioned above, the specification on pages 20-24 describes exemplary elements that may be present in the target array. Consequently, the Applicant respectfully requests the Examiner to withdraw the rejection of Claim 2 pursuant to 35 U.S.C. § 112, second paragraph.

In traversing the rejection of the independent Claim 2 pursuant to 35 U.S.C. §102(a), the Applicant respectfully submits that Jensen is defective in that it fails to disclose a method analyzing the structure of a target array, as particularly recited in the independent Claim 2. The Applicant respectfully submits that Jensen has no relevance to the method recited in Claim 2. Where as the claimed method is for analyzing the structure of a target array, Jensen's method is just for finding patterns in an array (not analyzing the structure). Jensen's method cannot be extended for analyzing the structure

of a target array (i.e. mRNA or DNA sequences). That is, Jensen fails to disclose the step of converting the target array into a first array by using the location of the same variable observed along a path extending in a predetermined direction, as particularly recited in Claim 2. Jensen is completely silent in this regard. Instead, Jensen discloses finding patterns in its array that comprises a list of patterns. Jensen further fails to disclose the step of converting the target array into a second array by using the location of the complementary variable observed along a path extending in a predetermined direction, as particularly recited in Claim 2. Again, Jensen is completely silent in this regard. Instead, as mentioned above Jensen discloses finding patterns in its array that comprises a list of patterns. However, to the contrary of Jensen, the present method analyses the structure of the target array by using the first array and second array, which include the structural information for the target array (i.e. a mRNA or DNA sequence). Consequently, Jensen does not disclose the method of analyzing the structure of the target array, as particularly recited in the independent Claim 2.

In view of the foregoing, the Applicant respectfully requests the Examiner to withdraw the rejection of the independent Claim s pursuant to 35 U.S.C. § 102(a).

In view of the foregoing, the Applicant believes that the above-identified application is in condition for allowance and the Applicant henceforth respectfully solicits the Examiner to allow the application. If the Examiner believes a telephone conference might expedite the allowance of this application, the Applicant respectfully requests that

the Examiner call the undersigned, Applicant's attorney, at the following telephone number: (516) 742-4343.

Respectfully submitted,



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